

5775 PEACHTREE-DUNWOODY RD. • BLDG. G, STE. 500 • ATLANTA, GEORGIA 30342 (404) 252-3663 • FAX (404) 252-0774 • E-mail: ifac@kellencompany.com

August 16, 2005

Arthur Neal,Program Administration National Organic Program USDA-AMS—TMP-NOP 1400 Independence Avenue, SW Room 4008---So., Ag Stop 0268 Washington, DC 20250 National.List@usda.gov

Fax: 202-205-7808

RE: Docket Number TM-04-07 – Advance notice of proposed rulemaking

with request for comments

Dear Mr. Neal:

The International Food Additives Council (IFAC) is a U.S. based international trade organization representing companies who produce high quality substances used worldwide as food additives. IFAC appreciates the opportunity to comment on the National Organic Program's June 17 advance notice of proposed rulemaking, requesting comments on certain synthetic and non-synthetic substances on the current National List of Allowed and Prohibited Substances for organic agricultural production and handling.

IFAC supports the continued use of all synthetic and non-synthetic substances currently allowed as ingredients in or on processed products labeled as "organic" or "made with organic." These ingredients are approved by the U.S. Food and Drug Administration and thus are deemed safe without environmental concerns. They have been evaluated previously under the National Organic Program and deemed appropriate for "organic" and "made with organic" products. If any of these substances were disallowed, the quality, number and types of "organic" and "made with organic" products available would decrease.

IFAC takes this opportunity to provide comments on specific listed ingredients.

Sec. 205.605 Nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s))."

(a) Nonsynthetics allowed:

Acids (alginic, citric – produced by microbial fermentation of carbohydrate substances; and Lactic) – These organic acids, obtained by fermentation of carbohydrate substances, have a long history of safe use in food. The production of these organic substances has not demonstrated any adverse environmental effects. These substances do not exhibit a potential for detrimental chemical interactions with other substances under typical use conditions. No adverse metabolic products have been shown to occur under typical use conditions. These substances

function as acidulants in food to control the pH of food systems. Organic acids degrade to form nontoxic and non-persistent environmental products. Lastly, in view of these factors, there is no known adverse effect of organic acids on human health.

Calcium Carbonate – Calcium carbonate is obtained by grinding high Calcium Carbonate containing ore (mined marble), which is thereafter purified by aqueous flotation, removal of water by filtration, dried by heated air, classified by particle size, and packaged. The recovery of calcium carbonate by the above process does not result in adverse environmental impact. Furthermore, calcium carbonate is a non-reactive substance and therefore has no potential for adverse chemical interactions with other substances. There are no known detrimental physiological effects of calcium carbonate in the environment. Calcium Carbonate provides a source for calcium in products such as breakfast cereal, nutritional bars, baked foods, fortified beverages, cookies and crackers, soups and sauces. Lastly, calcium carbonate has a long history of safe use as a calcium supplement in nutritional supplement products (e.g., see U.S. Department of Health and Human Services article entitled "Bone Health and Osteoporosis: A Report of the Surgeon General", dated October 14, 2004). Therefore there are no known adverse effects of calcium carbonate either to the environment or to human health.

Carrageenan – Carrageenan is a seaweed-derived hydrocolloid. Seaweed-derived hydrocolloids are carbohydrates obtained from a number of different species of algae found in various parts of the world. Carrageenan is obtained by extraction with water or alkaline water of certain species of seaweed. They are valuable for their gelling, thickening and stabilizing properties. Carrageenan has a long history of safe use, including its use in infant formula. Carrageenans perform by providing uniform gelling and texturing agents and are used in many food applications such as milk systems (dairy) and water systems (desserts, etc.).

**Dairy Cultures** – Dairy Cultures are obtained by fermentation processes using carbohydrate substances, and thereafter purified by physical separation techniques from the aqueous media. The concentrated cultures may be chilled and/or freeze-dried to assure viability of the culture. There is no adverse environmental impact as a result of the fermentation process. Further, these cultures do not contain reactive substances nor do they exhibit adverse biological and chemical interactions with respect to their intended use in agro ecosystems. These cultures that have a long history of safe use in food have shown no tendency to produce adverse metabolites or other adverse impact on the environment. In fact, the benefits of dairy cultures in human health have been evident for many years.

**Kaolin** – Kaolin is from naturally occurring kaolin or china clay. Kaolin is Generally Recognized As Safe ``as an indirect human food ingredient with no limitation other than current good manufacturing practice. Kaolin can be used directly in foods as an anticaking agent (up to 2.5%).

## (b) Synthetics allowed:

**Alginates** – Alginates are salts made with alginic acid. They are used to stabilize and thicken foods. They can hydrate at cold temperatures, form freeze thaw stable gels and heat stable gels. Some

examples of the types of food in which alginates are used are sauces (i.e. dry mix), dairy based beverages, and low fat spreads. Alginates provide bake stability of fillings in baked goods. They are used in the production of restructured foods, such as chunk style pet foods, fruits, onion rings and pimentos used in stuffed olives.

**Calcium Phosphates (monobasic, dibasic, and tribasic)** – Calcium phosphates are manufactured from mined, purified ingredients. In this process, substances that are restricted (As, Pb, F, Cd) by Food Chemicals Codex, 5<sup>th</sup> Edition, are removed in order to manufacture the food grade ingredients. This process does not result in adverse environmental impact. Calcium phosphates provide the critical leavening function in many baked goods, as well as providing two essential nutrients (calcium and phosphorus) to food products. There are no alternative organic substances or other practices that would make these food grade substances unnecessary.

**Pectin** (**low-methoxy**) – Low-methoxy pectin is used in the production of low sugar jams currently labeled as "organic" and is a large part of the organic fruit spread market in the United States. These products cannot be produced without low-methoxy pectin since, at this time, there is no alternative. Consumers in need of reduced sugar and/or reduced calorie products would, therefore, no longer have the option of reduced sugar jams were low-methoxy pectin disallowed.

Pectin is a natural component of all edible plant material and is a soluble dietary fiber. Pectin is a polymer of galacturonic acid and with that an acidic polysaccharide. Parts of the acids are present as methyl ester. Pectin is a hydrocolloid and binds a lot of water resulting in thickening and gelling properties. In that pectin (low-methoxy) is a natural extracellular polysaccharide not only should it remain on the list, but also the NOP should consider reclassifying pectin (low-methoxy) to a non-synthetic as per § 205.605(a).

Phosphoric Acid – cleaning of food-contact surfaces and equipment only – Phosphoric acid is produced from phosphate ore that is mined and purified, which removes impurities (As, Pb, F, Cd) that are restricted by the Food Chemicals Codex, 5<sup>th</sup> Edition. This acid provides superior performance in cleaning formulations used for a large variety of types of surfaces and soils found in different segments of the food industry. Phosphoric acid is a very effective scale remover and, as such, imparts a degree of food safety due to its high potency cleaning and removal of debris that could harbor either spoilage or pathogenic microorganisms. There are no alternative organic substances or other practices that would make this product unnecessary. Since it is used only for cleaning and is rinsed by potable water, there should be no carryover into subsequently processed foodstuffs.

**Silicon Dioxide** - Silicon Dioxide or synthetic amorphous precipitated silica is produced by the reaction of sodium silicate with a mineral acid. For precipitated silicas, reaction is carried out in neutral or alkaline media. Precipitated silica is non-toxic, odorless and chemically inert. Silicon Dioxide is used as a filler, carrier or free flow agent. Silicates can be used for powder blends, spices and beverage mixes.

**Potassium phosphate** – for use only in agricultural products labeled "made with organic (specified ingredients or food group(s))," prohibited in agricultural products labeled "organic." – Potassium phosphates are manufactured from mined, purified ingredients. In this process, substances that are restricted (As, Pb, F, Cd) by Food Chemicals Codex, 5<sup>th</sup> Edition, are removed in order to manufacture the food grade ingredients. This process does not result in adverse environmental impact. Potassium phosphates provide efficient pH buffering to products, and also provide both potassium and phosphorus to the product. There are no alternative organic substances or other practices that would make these substances unnecessary.

**Sodium Phosphates – for use only in dairy foods** — Sodium phosphates are manufactured from mined, purified ingredients. In this process, substances that are restricted (As, Pb, F, Cd) by Food Chemicals Codex, 5<sup>th</sup> Edition, are removed in order to manufacture the food grade ingredients. This process does not result in adverse environmental impact. Sodium phosphates provide many important functions in dairy foods, due to their ability to stabilize casein proteins, to interact with proteins and the fat-water matrix to promote emulsification, and to disperse proteins and flavors in reconstituted milk powders. They are also very effective buffers, allowing dairy foods to maintain the appropriate pH characteristics for safety and flavor, while using a minimum level of these food ingredients. There are no alternative organic substances or other practices that would make these food grade substances unnecessary.

**Xanthan gum** – Xanthan Gum is produced from natural sources, e.g., bacterial fermentation using naturally occurring nutrients, and contributes a unique attribute to foods and beverages, thus allowing many more organic products to be formulated and marketed to the consumer. Xanthan gum is used in various food and beverage formulations such as batters, baked goods, bakery and pie filings, beverages, confectionary, dairy products, desserts, dietetic foods, dressings, dry mixes, flavor emulsions, frozen foods, icings and frostings, relish, retorted products, sauces and gravies, syrups and toppings.

The mode of action is as a thickener, stabilizer and emulsifier with texturizing attributes. The typical amounts of xanthan gum used are small, less than 1.0% of the processed food, because of its self-limiting nature. If the concentration of substance is too high the product will be inedible or unusable.

Since xanthan gum is a natural extracellular polysaccharide not only should it remain on the list, but also the NOP should consider reclassifying xanthan gum to a non-synthetic as per § 205.605(a).

Sec. 205.606 Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled or "organic" or "made with organic (specified ingredients or food group(s))."

Gums – water extracted only (arabic, guar, locust bean, carob bean) – Gums are important in many products, for example organic dressings and sauces, because they provide texture and mouthfeel thereby increasing palatability while decreasing calories.

**Gum Arabic** – Gum arabic is a gum exuded by various African trees of the genus Acacia, especially A. Senegal. Gum Arabic is widely used in the food industry, as an emulsifier, thickener, flavor encapsulator, and thickening agent.

**Locust Bean Gum/Carob** – Locust bean gum is a textural ingredient, obtained from the kernels of the carob tree (Ceratonia Siliqua) that grows in Mediterranean countries. LBG is used in applications such as cream cheese, dairy desserts, ice cream, fruit preparations, baked goods, and dressings and sauces.

**Pectin** (**high methoxy**) - <u>Pectin</u> is a natural component of all edible plant material and is a soluble dietary fibre. Pectin is a polymer of galacturonic acid and with that an acidic polysaccharide. Parts of the acids are present as methyl ester. Pectin is a hydrocolloid and binds a lot of water resulting in thickening and gelling properties

Pectin is used in applications such as: Fruit applications (jams, jellies, and desserts), bakery fillings and toppings, fruit preparations for dairy applications, dairy applications (acidified milk and protein drinks; yogurts), confectionery (fruit jellies; neutral jellies), beverages; nutritional and health products.

Again, IFAC requests that all currently listed ingredients in the Code of Federal Regulations, Title 7, Part 205, under Sections 205.605 and 205.606 continue to be approved for use in products currently labeled "organic" and "made with organic" and appreciates your consideration of the comments provided above.

Respectfully submitted,

Lyn O'Brien Nabors

Lyn O'Brien Nabors President